

MINERAL INDUSTRY SURVEYS

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Iron Ore, Monthly

IRON ORE IN JUNE 1996

U.S. mine production of iron ore in June was 6.2% lower than that of May, according to the U.S. Geological Survey. Shipments decreased by 1.2% and mine stocks decreased by 11.5%. Consumption and trade data for June will be included in a subsequent report.

CVRD Takes Part in Dam

Companhia Vale do Rio Doce (CVRD), the world's largest iron ore producer, is heading a consortium which is building a \$270 million 210-megawatt dam in east-central Minas Gerais State in Brazil. The dam will allow CVRD, with a 35% interest in the consortium, to become partially self-sufficient in energy. The dam, named Igarapava, is expected to go into operation in December 1998.

To help finance the project, CVRD signed an agreement with Voest Alpine Industrienlagenbau GmbH (VAI) of Linz, Austria, to swap iron ore for elec-

tricity generators for the dam. The deal calls for 3.2 million metric tons (Mt) of ore to be exchanged over 5 years in return for five generators worth \$57 million. VAI is Austria's largest steelmaker in addition to being a major producer of hydroelectric generators. VAI, which has the right to sell 800,000 tons of the ore and keep 2.4 Mt, will probably keep all of the ore. The company's mine, which has been worked since the middle ages, is scheduled to close in 1997. (American Metal Market, July 17, 1996, v. 104, no. 137, p. 11 and International Iron and Steel Institute, The World Market on Iron Ore, Committee on Raw Materials, Brussels, 1995, p. 147)

CVRD to Build Screening Plant

CVRD will build a \$7 million screening plant at its Carajas complex to fulfill its contractual obligations to supply fine ore to the hot briquetted iron (HBI) plant that

is to be built in Trinidad (See IRON ORE IN FEBRUARY 1996). The plant is scheduled to be producing 900,000 tons per year (t/yr) by February 1998. The HBI plant will have an initial capacity of at least 500,000 t/yr. (American Metal Market, July 22, 1996, v. 104, no. 140, p. 3)

Indian Pellet Plant Begins Operations

Essar Gujarat Ltd., of India, has begun making test runs on its new 3 Mt/yr pellet plant in Visakhapatnam. The Lurgi type plant was completed in May 1996. Essar plans to produce 2 Mt/yr for the first year and 3 Mt/yr thereafter. During the first 2 years, the plant will produce pellets for the blast furnace market and will then switch to pellets for direct reduction. (The Tex Report, June 18, 1996, v. 28, no. 6619, p. 1)

TABLE 1
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE, BY DISTRICTS 1/
(Exclusive of ore containing 5% or more manganese)

(Thousand metric tons)

Period	Lake Superior		Other U.S.		Total 2/	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
Production						
1995:						
June	5,395	29,684	16	203	5,411	29,885
July	5,672	35,356	21	224	5,693	35,578
August	5,666	41,022	26	250	5,691	41,269
September	5,382	46,404	49	299	5,431	46,700
October	5,542	51,946	23	322	5,565	52,265
November	5,089	57,035	57	379	5,146	57,411
December	4,991	62,026	48	427	5,039	62,450
1996:						
January	4,232	4,232	35	35	4,267	4,267
February	4,217	8,449	25	60	4,242	8,509
March	4,801	13,250	23	83	4,824	13,333
April	4,668	17,918	22	105	4,690	18,023
May	5,479	23,397	20	125	5,500	23,522
June	5,138	28,535	22	147	5,160	28,682
Shipments						
1995:						
June	5,346	25,217	28	229	5,374	25,447
July	5,837	31,054	29	258	5,867	31,314
August	6,463	37,517	26	285	6,489	37,803
September	5,963	43,480	30	315	5,993	43,796
October	5,754	49,234	37	352	5,791	49,587
November	5,632	54,866	44	396	5,676	55,263
December	5,596	60,462	39	435	5,635	60,898
1996:						
January	3,363	3,363	12	12	3,375	3,375
February	1,315	4,678	21	33	1,336	4,711
March	2,357	7,035	25	58	2,382	7,093
April	5,290	12,325	20	78	5,310	12,403
May	6,003	18,328	21	99	6,024	18,427
June	5,935	24,263	17	116	5,952	24,379

1/ Excludes byproduct ore.

2/ Data may not add to totals shown because of independent rounding.

TABLE 2
U.S. PRODUCTION, SHIPMENTS AND STOCKS OF IRON ORE IN JUNE 1/
(Exclusive of ore containing 5% or more manganese)

(Thousand metric tons)

District	Production		Shipments 2/		Stocks 3/	
	1996	1995	1996	1995	1996	1995
Lake Superior:						
Michigan	1,273	1,242	1,507	849	1,994	2,183
Minnesota	3,865	4,153	4,428	4,497	6,363	4,957
Other U.S.	22	16	17	28	121	78
Total 4/	5,160	5,411	5,952	5,374	8,477	7,219

1/ Excludes byproduct ore.

2/ Includes rail and vessel.

3/ Includes mines, plants and loading docks.

4/ Data may not add to totals shown because of independent rounding.

TABLE 3
CANADA: SHIPMENTS OF IRON ORE

(Thousand dry metric tons)

Period	Newfoundland	Quebec	Ontario	British Columbia	Total 1/
1995:					
June	2,027	966	106	7	3,106
July	2,417	1,212	131	8	3,767
August	2,551	1,160	117	8	3,836
September	2,150	1,331	52	6	3,539
October	1,985	1,435	50	7	3,476
November	1,823	1,314	55	7	3,199
December	1,442	1,473	83	6	3,004
Year total	19,969	14,121	1,020	83	35,193
1996:					
January	477	686	42	7	1,212
February	646	927	46	7	1,626
March	444	743	49	7	1,242
April	2,075	741	36	7	2,858
May	1,343	1,927	45	8	3,324
June	NA	NA	NA	NA	NA

NA Not available.

1/ Data may not add to totals shown because of independent rounding.

Source: Natural Resources Canada.

TABLE 4
CONSUMPTION AND STOCKS OF IRON ORE AND AGGLOMERATES AND
BLAST FURNACE PRODUCTION OF HOT METAL AT U.S. IRON AND STEEL PLANTS

(Thousand metric tons)

Consumption of ores and agglomerates				
Consumption by source	May		Year to date	
	1996	1995	1996	1995
United States ores	5,140	4,792	23,768	24,866
Canadian ores	532	582	3,296	3,543
Foreign ores	726	738	3,519	3,255
Total 1/	6,399	6,112	30,583	31,664
Consumption by process				
Blast furnaces	5,880	5,583	27,686	29,086
Steel furnaces	8	6	33	27
Agglomerating plants 2/	508	522	2,859	2,549
Miscellaneous 3/	3	--	6	1
Total 1/	6,399	6,112	30,583	31,664
Stocks of ores and agglomerates				
Storage point	May 31			
	1996	1995		
Furnace yards	10,445	10,192		
Receiving/transfer docks	1,769	1,998		
Total consumer	12,214	12,189		
Blast furnace production of hot metal				
	May		Year to date	
	1996	1995	1996	1995
Hot metal and pig iron produced in blast furnaces	4,135	4,240	20,985	21,257
No. of blast furnaces operating on the last day of the month	38	39	XX	XX

XX Not applicable.

1/ Data may not add to totals shown because of independent rounding.

2/ Iron ore and iron ore concentrates consumed in agglomerating plants not located at the mine site.

3/ Sold to nonreporting companies or used for purposes not listed.

Sources: American Iron Ore Association (consumption of iron ore) and American Iron and Steel Institute (production of hot metal and pig iron).

TABLE 5
U.S. EXPORTS OF IRON ORE AND AGGLOMERATES, BY COUNTRY
OF DESTINATION AND TYPE

(Thousand metric tons)

Country of destination and type	1995		1996			
	3rd Quarter	4th Quarter	1st Quarter	March	April	May
Canada	1,569	1,257	833	326	158	766
Mexico	(1/)	(1/)	5	1	1	1
Other	1	(1/)	1	1	1	3
Total 2/	1,570	1,257	840	328	159	770
Pellets	1,511	1,225	833	326	157	764
Other	59	32	7	1	3	6
Total 2/	1,570	1,257	840	328	159	770

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND AGGLOMERATES,
BY COUNTRY AND TYPE
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	May 1996		Year to date 1996			Year to date 1995 2/ (thousand metric tons)
	Thousand metric tons	Value 1/ (thousand dollars)	Thousand metric tons	Value 1/ (thousand dollars)	Value 1/ (dollars per ton)	
Australia	63	413	312	2,092	6.71	262
Bahamas, The	62	1,764	125	3,158	25.26	--
Brazil	388	11,114	1,818	45,650	25.11	1,574
Canada	951	32,379	2,505	83,583	33.37	2,077
Chile	--	--	39	589	15.10	--
Finland	--	--	3	154	51.33	6
Indonesia	--	--	--	--	--	(3/)
Mauritania	--	--	133	2,322	17.46	179
Mexico	--	--	(3/)	8	20.40	--
Peru	--	--	43	451	10.49	45
Spain	--	--	11	181	16.45	--
Trinidad and Tobago	--	--	--	--	--	5
United Kingdom	--	--	--	--	--	2
Uruguay	--	--	24	591	24.63	--
Venezuela	138	4,932	1,038	38,077	36.68	923
Total 4/	1,602	50,603	6,052	176,855	29.22 5/	5,073
Concentrates	77	1,218	159	2,563	16.12	241
Coarse ores	118	3,955	450	15,611	34.69	714
Fine ores	221	3,796	1,640	26,512	16.17	1,524
Pellets	1,159	40,736	3,617	126,996	35.11	2,364
Briquettes	--	--	--	--	--	--
Other agglomerates	26	897	183	5,009	27.37	224
Roasted pyrites	--	--	3	164	54.67	6
Total 4/	1,602	50,603	6,052	176,855	29.22 5/	5,073

1/ Customs value. Excludes international freight, insurance, and other c.i.f. charges. Unit values shown are calculated from unrounded data.

2/ Data was previously published as rounded numbers.

3/ Less than 1/2 unit.

4/ Data may not add to totals shown because of independent rounding.

5/ Weighted average calculated from unrounded data by dividing total value by total tonnage.

Source: Bureau of the Census.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND AGGLOMERATES IN MAY 1996 1/
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product					Total 1/
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	
Australia	--	--	63	--	--	63
Bahamas, The	--	--	62	--	--	62
Brazil	77	--	96	188	26	388
Canada	(2/)	73	(2/)	878	--	951
Venezuela	--	45	--	93	--	138
Total 3/	77	118	221	1,159	26	1,602

1/ All or part of these data have been referred to the Bureau of Census for verification.

2/ Less than 1/2 unit.

3/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY

Country of origin	May 1996		Year to date 1996			Year to date 1995 (thousand metric tons)
	Thousand metric tons	Value 1/ (thousand dollars)	Thousand metric tons	Value 1/ (thousand dollars)	Value 1/ (dollars per ton)	
Brazil	188	7,397	690	24,451	35.44	295
Canada	878	29,785	2,313	78,876	34.10	1,733
Peru	--	--	--	--	--	36
Venezuela	93	3,555	613	23,669	38.61	301
Total 2/	1,159	40,736	3,617	126,996	35.11 3/	2,364

1/ Customs value. Excludes international freight, insurance, and other c.i.f. charges. Unit values shown are calculated from unrounded data.

2/ Data may not add to totals shown because of independent rounding.

3/ Weighted average calculated from unrounded data by dividing total value by total tonnage.

Source: Bureau of the Census.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND
AGGLOMERATES, BY CUSTOMS DISTRICT
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district	May	Year to date	
	1996	1996	1995
Baltimore, MD (13)	441	1,680	1,549
Buffalo, NY (09)	--	(1/)	--
Charleston, SC (16)	81	219	218
Chicago, IL (39)	303	508	556
Cleveland, OH (41)	27	142	214
Detroit, MI (38)	170	448	25
Duluth, MN (36)	--	51	--
Houston - Galveston, TX (53)	--	21	--
Los Angeles, CA (27)	--	(1/)	(1/)
Mobile, AL (19)	424	1,471	1,249
New Orleans, LA (20)	--	695	618
Nogales, AZ (26)	--	(1/)	--
Ogdensburg, NY (07)	(1/)	(1/)	--
Philadelphia, PA (11)	155	804	631
Portland, ME (01)	--	(1/)	--
San Diego, CA (25)	--	--	9
San Juan, PR (49)	--	11	5
Total 2/	1,602	6,052	5,073

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY CUSTOMS DISTRICT

(Thousand metric tons)

Customs district	May	Year to date	
	1996	1996	1995
Baltimore, MD (13)	282	654	493
Charleston, SC (16)	55	101	115
Chicago, IL (39)	226	375	314
Cleveland, OH (41)	27	118	186
Detroit, MI (38)	170	448	24
Duluth, MN (36)	--	51	--
Houston - Galveston, TX (53)	--	13	--
Mobile, AL (19)	306	1,021	705
New Orleans, LA (20)	--	287	36
Philadelphia, PA (11)	93	550	492
Total 2/	1,159	3,617	2,364

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.